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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/659,652 | 09/10/2003 | Muxiang Zhang | 02-8027 | 3700 |
| 25537 VERIZON PATENT MANAGEMENT GROUP 1515 N. COURTHOUSE ROAD SUITE 500 ARLINGTON, VA 22201-2909 | 7590 04/01/2008 | | EXAMINER POLTORAK, PIOTR | |
| | | | ART UNIT 2134 | PAPER NUMBER |
| | | | NOTIFICATION DATE 04/01/2008 | DELIVERY MODE ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@verizon.com

Office Action Summary

Application No.

10/659,652

Applicant(s)

ZHANG, MUXIANG

Examiner

PETER POLTORAK

Art Unit

2134

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 18-25 and 34-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-8, 22-25 and 38-41 is/are allowed.
- 6) ☒ Claim(s) 1-4, 18-21 and 34-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The amendment received on 2/05/08 has been entered.

Response to Amendment

2. Applicant arguments have been carefully considered.
3. In light of applicant amendments and arguments the objection to drawings as well as the 35 USC § 112 rejections, cited in the previous Office Action, are withdrawn.
4. As per the art rejection, applicant argues the newly introduced limitations introduced to claim 1. These limitations are addressed in this Office Action, below.
5. Claims 1-8, 18-25 and 34-41.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

6. Claims 1-4, 18-21 and 34-37 remain rejected under 35 U.S.C. 102(e) as being anticipated by Aura (USPN 6711400).

As per claims 1, 18 and 34, Aura discloses a system and a method for facilitating authentication in a wireless network comprising:

- a. receiving an initial nonce value (RAND1) and a mobile station message authentication code value (IMSI) from a serving mobile network (VPLMN) in an authentication data request (data comprising IMSI, RAND1 values) associated with a user device (MS), the initial nonce value originating from the user device (object 401, Fig. 4) and

the message authentication code value is determined from data originating from the user device (from the point of VPLMN it is MS that originated data and from the point of HRLC/AUC it is VPLMN that originates the data);

- b. generating a subsequent nonce value (RAND2) from the initial nonce value based on a first authentication function that is shared with the user device (object 404, algorithms A3 and A8, Fig. 4, col. 2 lines 27-col. 3 line 19);
 - c. generating an authentication vector (405) associated with the user device, the authentication vector including the subsequent nonce value; and transmitting the authentication vector to the serving mobile network (Fig. 4).
7. As per claims 2, 19 and 35, Aura discloses receiving an International Mobile Station Identifier (IMSI) corresponding to the user device from the serving mobile network (Fig. 4).
8. As per claims 3-4, 20-21 and 36-37, Aura discloses receiving a visiting location register randomized authentication value (SRES1), a mobile station randomized authentication value (Kc) and a mobile station message authentication value (SRES2'), generating a visiting location register randomized authentication value (SRES2) based on the visiting location register randomized authentication value and determining whether the visiting location register randomized authentication value (carried out by evaluating a second authentication function with the visiting location

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register randomized authentication value and the mobile station randomized authentication value as inputs) equals the mobile station message authentication (409).

Allowable Subject Matter

Claims 5-8, 22-25 and 38-41 overcome the art of record.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Poltorak whose telephone number is (571) 272-3840. The examiner can normally be reached Monday through Thursday from 9:00 a.m. to 4:00 p.m. and alternate Fridays from 9:00 a.m. to 3:30 p.m.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Peter Poltorak/

Examiner, Art Unit 2134

/Kambiz Zand/

Supervisory Patent Examiner, Art Unit 2134